the prior drawing, the reference numeral 63 is added to the figure. As described below in the Remarks section, this drawing change adds no new matter. Applicant additionally notes that the error with reference numeral 79 in the prior proposed drawing change has been corrected.

IN THE CLAIMS:

Please cancel claim 16 and add new claims 23-26. Applicant has provided marked up claim amendments in an addendum to this Amendment. Using those amendments, please amend the full set of claims to read as follows:

1. A carrier for connecting a printed circuit board card to a chassis, wherein the card has a lower edge including a card system connector, wherein the chassis defines an opening for receiving a card, and wherein the chassis includes a chassis system connector to be placed in communication with the card system connector of the received card, the chassis system connector and opening defining a carrier-insertion direction, comprising:

a body having a front end and a rear end;

a first system connector carried on the body and configured to mate and communicate with the card system connector in a card-insertion direction; and

a second system connector carried on the body and configured to mate and communicate with the chassis system connector, wherein the second system connector is in communication with the first system connector;

wherein the first and second system connectors are configured such that the card-insertion direction differs from the carrier-insertion direction; and

wherein the body and the first and second system connectors are configured such that, with the card system connector mated to the first system connector, the second system connector fits insertably through the opening in the chassis-insertion direction to mate with the chassis system connector.

2. The carrier of claim 1, wherein:

the body and first system connector are configured such that the card bulkhead would be approximately coplanar with the chassis opening when the card system connector is mated with the first system connector and the second system connector is mated with the chassis system connector.

3. The carrier of claim 2, wherein the body includes integral wiring to put the second system connector in communication with the first system connector.

Sub C4 cont

4. The carrier of claim 2, and further including a guide at the front end of the body, the guide being configured to guide movements of the card in mating the card system connector with the first system connector, and the guide being configured to support the card when the card system connector is mated with the first system connector.

5. The carrier of claim 2, and further including:

a guide at the front end of the body, the guide being configured to guide movements of the card in mating the card system connector with the first system connector, and the guide being configured to support the card when the card system connector is mated with the first system connector; and

a handle integral with the guide, the handle being configured for controlling the insertion and extraction of the carrier into and out of the chassis.

6. The carrier of claim 2, and further including a first guide at the front end of the body and a second guide at the back end of the body, the first and second guides being configured to guide movements of the card in mating the card system connector with the first system connector, the first and second guides being configured to support the card when the card system connector is mated with the first system connector, and the second guide being adjustable to accommodate different length cards.

7. The carrier of claim 2, wherein the first system connector is configured to receive a Peripheral Component Interconnect card.

Sub C+ Cont.

8. A connection system for connecting a printed circuit board card to a chassis, wherein the card has a lower edge including a card system connector, wherein the card has a bulkhead extending along a side of the card that adjoins the lower edge, and wherein the chassis defines an opening for receiving a card, comprising:

a chassis system connector mounted in the interior of the chassis, the chassis system connector and opening defining a carrier-insertion direction; and

a carrier, the carrier comprising

a body having a front end and a rear end,

a first system connector carried on the body, the first system connector being configured to mate and communicate with the card system connector in a card-insertion direction, and

a second system connector carried on the body, configured to mate and communicate with the chassis system connector, the second system connector being in communication with the first system connector,

wherein the first and second system connectors are configured such that the card-insertion direction differs from the carrier-insertion direction;

wherein the body and the first and second system connectors are configured such that, with the card system connector mated to the first system connector, the second system connector fits insertably through the opening in the carrier-insertion direction to mate with the chassis system connector; and

wherein the body and first system connector are configured such that the card bulkhead would be approximately coplanar with the chassis opening when the card system connector is mated with the first system connector and the second system connector is mated with the chassis system connector.

9. The connection system of claim 8, and further comprising a guide configured to guide the carrier through the chassis opening, and configured to guide the second system connector to mate with the chassis system connector.

10. The connection system of claim 8, and further comprising:

a guide extending from an end within the chassis to an end at the chassis opening, the guide being configured to guide the carrier through the chassis opening, and configured to guide the second system connector to mate with the chassis system connector, wherein the guide is configured as a track composed of a translucent material; and

a light source at the guide end within the chassis, the light source being configured to illuminate the guide end at the chassis opening, and the light source being configured to provide information on the status of the card.

11. The connection system of claim 8, and further comprising a compressive, electrically conductive material configured to contact both the card and the chassis when the carrier and card are inserted in the chassis, to create an electrical connection between the chassis and the card.

Sub C4 Cont.

12. The connection system of claim 8, and further comprising:

a guide extending from an end within the chassis to an end at the chassis opening, the guide being configured to guide the carrier through the chassis opening, and configured to guide the second system connector to mate with the chassis system connector, wherein the guide is configured as a track composed of a translucent material;

a light source at the guide end within the chassis, the light source being configured to illuminate the guide end at the chassis opening, and the light source being configured to provide information on the status of the card; and

a compressive, electrically conductive material configured to contact both the card and the chassis when the carrier and card are inserted in the chassis, to create an electrical connection between the chassis and the card;

wherein the first system connector is configured to receive a Peripheral Component Interconnect card.

Sub C1 cont

13. A computer system configured to be connected to a plurality of printed circuit board cards, wherein each card has a lower edge including a card system connector, and wherein each card has a bulkhead extending along a side of the card that adjoins the lower edge, comprising:

a chassis defining an interior and one or more openings into the interior for receiving the plurality of cards;

a central processing unit;

a bus connecting to the central processing unit;

a plurality of chassis system connectors mounted in the interior of the chassis and connected to the bus, each of the plurality of chassis system connectors defining a carrier-insertion direction with one of the one or more openings;

a plurality of carriers, each carrier comprising

a body having a front end and a rear end,

a first system connector carried on the body, the first system connector being configured to mate and communicate with the card system connector of at least one of the plurality of cards in a card-insertion direction, and

a second system connector carried on the body, configured to mate and communicate with at least one of the plurality of chassis system connectors, the second system connector being in communication with the first system connector,

wherein the first and second system connectors are configured such that the card-insertion direction differs from the carrier-insertion direction; and

a plurality of guides, each guide being configured to guide at least one of the plurality of carriers through one of the one or more chassis openings, and

further guide the second system connector of the guided carriers to mate with one of the chassis system connectors;

wherein each body and corresponding first and second system connectors are configured such that, with one of the plurality of card system connectors mated to the first system connector, the second system connector fits insertably through at least one opening in the carrier-insertion direction to mate with at least one of the plurality of chassis system connectors; and

wherein each body and first system connector are configured such that the card bulkhead would be approximately coplanar with one of the one or more chassis openings when the card system connector is mated with the first system connector and the second system connector is mated with one of the plurality of chassis system connectors.

14. The computer system of claim 13, and further comprising a subsystem configured to isolate logic and power signals between one of the plurality of chassis system connectors and the rest of the plurality of chassis system connectors.

15. The computer system of claim 13, wherein:

each of the plurality of guides extend from an end within the chassis to an end at one of the one or more openings of the chassis, the guide being configured as a track composed of a translucent material;

the computer system further comprises a light source at the each of the plurality of guide ends within the chassis, the light source being configured to illuminate the guide ends at the chassis opening, and the light source being configured to provide information on the status of a card received along that guide; and

the computer system further comprises a subsystem configured to isolate logic and power signals between one of the plurality of chassis system connectors and the rest of the plurality of chassis system connectors, and configured to activate the light sources to provide the information on the status of the card.

16. A connection system for connecting a system connector in communication with a printed circuit board card to a circuit board backplane within the interior of a chassis that defines an opening for receiving the card, comprising:

a chassis system connector configured for mounting on the backplane, the chassis system connector defining a carrier-insertion direction with the opening;

a guide being configured as a track to guide the card through the chassis opening, and further guide the system connector in communication with the card to mate with the chassis system connector, wherein the guide extends from an end adjacent to the backplane to an end at the opening of the chassis, the guide being composed of a translucent material;

a light source on the backplane at the guide end within the chassis, the light source being configured to illuminate the guide ends at the chassis opening, and the light source being configured to provide information on the status of the card received along the guide; and

a subsystem configured to activate the light source to provide the information on the status of the card.

17. A method of connecting a printed circuit board card to a computer, wherein the card has a lower edge including a card system connector, wherein the card has a bulkhead extending along a side of the card that adjoins the lower edge, wherein the computer has a chassis defining an interior and an opening into the interior for receiving the card, and wherein the computer has a chassis system connector mounted in the interior of the chassis, the chassis system connector defining a carrier-insertion direction with the opening, comprising:

mating the card system connector with a system connector on a carrier, wherein the carrier includes:

a body having a front end and a rear end,

a first system connector carried on the body, the first system connector being configured to mate and communicate with the card system connector in a card-insertion direction, and

a second system connector carried on the body, configured to mate and communicate with the chassis system connector, the second system connector being in communication with the first system connector; and

guiding the carrier through the chassis opening in the carrier-insertion direction to mate the second system connector with the chassis system connector;

wherein the body and first system connector are configured such that the card bulkhead is approximately coplanar with the chassis opening after the card system connector is mated with the first system connector and after the second system connector is mated with a chassis system connector.

18. The method of claim 17, wherein the step of guiding comprises guiding the carrier with a guide configured to guide the carrier through the chassis opening, and configured to guide the second system connector of the carrier to mate with the chassis system connector.

19. The method of claim 17, and further comprising isolating logic and power signals to the chassis system connector prior to mating the second system connector with the chassis system connector.

20. A connection system for connecting a printed circuit board card to a chassis, wherein the card has a lower edge including a card system connector that defines a card-insertion direction parallel to a bulkhead extending along a side of the card that adjoins the lower edge, and wherein the chassis defines an opening for receiving the card, comprising:

a chassis system connector mounted in the interior of the chassis, the chassis system connector and opening defining a carrier-insertion direction; and

a means for placing the card system connector in communication with the chassis system connector, wherein the card bulkhead is positioned to be approximately coplanar with the chassis opening when the card system connector in communication with the chassis system connector;

wherein the chassis system connector is not substantially parallel to the card system connector; and

wherein the means for placing is configured for passing through the opening to mate with the chassis system connector while mated to the card system connector.

Sub CS Cont

21. A carrier for electrically connecting a card to a chassis, wherein the card and the chassis each include a plurality of electrical pins, and wherein the chassis defines a card-insertion opening, comprising:

a body having a front end and a rear end;

a first plurality of electrical pins carried on the body and configured to electrically connect with the plurality of pins of the card;

a second plurality of electrical pins carried on the body and configured to electrically connect with the plurality of pins of the chassis; and

a connector configured to electrically connect the first plurality of electrical pins to the second plurality of electrical pins;

wherein the body and the first and second plurality of pins are configured such that, with the first plurality of electrical pins electrically connected to the plurality of pins of the card, the body and the card fit insertably through the chassis opening such that the second plurality of electrical pins electrically connect with the plurality of pins of the chassis.

22. A carrier for connecting a card system connector of a card having circuits to a chassis system connector of a chassis having circuits, wherein the chassis defines an opening for receiving the card substantially through the opening in a carrier-insertion direction, comprising:

a body;

a first system connector carried on the body and configured to mate with the card system connector in a card-insertion direction; and

a second system connector carried on the body and configured to mate with the chassis system connector in the carrier-insertion direction, wherein the first and second system connectors are connected such that they are configured for carrying communications between the card system connector and the chassis system connector;

wherein the first system connector is configured such that the card-insertion direction differs from the carrier-insertion direction; and

wherein the body and the first and second system connectors are configured such that, with the card system connector mated to the first system connector, the second system connector fits insertably through the opening in the carrier-insertion direction to mate with the chassis system connector.

23. The carrier of claim 1, wherein the card has bulkhead on a side of the card that adjoins the lower edge, wherein:

the card-insertion direction is parallel to the bulkhead.

24. The connection system of claim 8, wherein the card-insertion direction is parallel to the bulkhead.

25. The computer system of claim 13, wherein the card-insertion direction is parallel to the bulkhead.

26. The method of claim 17, wherein, in the step of mating, the card-insertion direction is parallel to the bulkhead.